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A Dissertation
on the management of the Placenta after Parturition.

by

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A Dissertation &c.

The proper management of the placenta, after the delivery of the child, constitutes a very important part in the judicious practice of Midwifery. As long as the placenta is retained, women remain in a state of anxiety and distress, and are in the greatest danger of suffering from uterine hemorrhage; and, if long retained, from other dangerous consequences.

To treat this subject with more convenience, it may be arranged under the following two heads, viz:

First. The management of the placenta, in cases where it is expelled in the course of one hour after the delivery of the child, by the spontaneous action of the uterus.

Second. The management of the placenta when it is not expelled in one hour from the time of the delivery of the child, owing either to an atony in the uterus; or an irregular contraction of it round the placenta;

or to a preternatural adhesion of the secundines to the internal surface of the uterus.

The management of the placenta proper under the first head, is very simple. The child being born, a ligature of some strength is to be applied to the *funis umbilicalis* at the distance of about three inches from the umbilicus. The reason, for applying the ligature at some distance from the navel, is, that, in case the first ligature should slip off a second might be applied. Another ligature ought to be applied to the funis about two inches nearer to the placenta, to prevent the unnecessary effusion of blood on the bed. Another strong, additional reason, for tying the placental extremity of the cord, is suggested by Professor James: that the cords of twins might communicate, and the hemorrhage from the cord of the child born first, might destroy the life of the other child in the uterus. It is however not likely that the hemorrhage from the placental extremity of the cord, would have any

great effect upon the system of the mother, as there is no direct communication between the fœtal and maternal portions of the placenta; at least this cannot be proved to exist by ordinary injections, as agreed upon by most mordern anatomist. Professor Hosack is however said, to hold a different opinion. Several reasons have been advanced by some, why the placental extremity of the cord should not be tied. They maintain, that, by the hemorrhage from the cord, the bulk of the placenta is lessened, and contraction of the uterus exited. This argument is probably more specious, than solid. Since both the separation and expulsion of the placenta depend upon the contraction of the uterus, it is not at all improbable that, by tying the placental extremity of the cord, the substance of the placenta being thereby kept turgid, the uterine surface at the place of attachment, is stimulated to contract, which separates and expells the placenta.

The ligature should not be applied until the pul-

sation at the funis has ceased, or at least until the child has cried out heartily, that the new circulation now to commence may be thus properly established. Until this has taken place the life of the child according to Mr. White is to be considered as merely fœtal, or as if it were yet *in utero*. Whilst there remains a pulsation in the arteries of the funis, it proves the existence of fœtal life; and the existence of fœtal life proves the imperfection of animal life. Whilst the animal life therefore is imperfect, Mr. White lays it down as a rule, that the fœtal life ought not to be destroyed. The funis umbilicalis therefore should never be divided or tied, whilst there is any pulsation in the arteries. "By this most inconsiderate method of tying the navel string before the circulation in it is stopt, I doubt not (continues Mr. White) but many children have been lost, many of their principal organs have been injured, and foundations laid for various disorders".

Whilst on the subject of tying the funis, an obser-

vation of Sabatier may be mentioned, which is worthy of notice. He says he has often known in cases of congenital umbilical hernia, that the displaced intestines have protruded along the umbilical cord, without much increasing its size, and have been tied by the ligature made on it, occasioning the death of the infant.

After the child is removed, the hand is to be applied to the belly to ascertain whether there be not a second child, or whether the uterus has properly contracted on the placenta; and for the same purpose, the finger may be slid gently along the cord to the os uteri. If a second child remain, the enlarged uterus is felt very distinctly, betwen the pubis and the umbilicus and even above the latter, and not as much diminished in size as might previously have been supposed; but if there be no child left and the uterus has contracted in some measure upon the placenta, it is felt greatly diminished in size, of a globular form and

extending some distance above the symphysis pubis. If the uterus is left in a state of torpor, it cannot be felt distinctly.

In the mean time, the hand of an assistant should be applied to the abdomen, and gently pressed on the uterus, which may excite it to action and prevent torpor. If the placenta be not expelled soon, the uterine region may be gently rubbed with the hand to excite the contraction of the womb. In a short time generally within half an hour; in fifteen or twenty minutes according to Clark who paid much attention to the management of the placenta, and in ten or fifteen minutes, in this country, according to the observations of Professor James, one or two trifling pains are felt, and the placenta is expelled.

Soon after the child is born, we should desire the woman to let us know when she feels any pain coming on; for this is always a sign that the uterus begins to contract.

When a pain is felt by the woman, we apply the hand to the abdomen to ascertain, whether the uterus can be felt to contract; for the same purpose, after passing the cord several times round the fore finger of the left hand, the fore finger of the right hand may be slid up along the *funis umbilicalis* towards its insertion into the placenta. If the insertion of the cord can readily be felt we may rest assured that the uterus has contracted actively upon the placenta, and forced it down into the upper part of the vagina; then we may with safty pull gently and cautiously at the cord, to assist in bringing away the placenta; whilst, with the finger of the right hand still in the mouth of the womb, we ascertain that no inversion of the uterus take place. This is an accident that may happen even to the most skillful practitioner, if he be not on his guard at this moment. If however the *fundus uteri* is felt to come down, Professor James

recommends the speedy introduction of the hand into the uterus, to carry up the fundus, and support it there until the uterus is felt to contract and the hand is expelled.

The membranes are sometimes left in the uterus after the extraction of the placenta, and may prove a source of great alarm, both to the patient and to her friends. As they generally come away spontaneously in the course of a short time, little harm would result to the patient from their retention; yet as this circumstance might give rise to impressions prejudicial to the reputation of the young practitioner, it ought to be avoided. In order therefore to bring away the membranes with the placenta, we are advised by Professor James, that, after having brought the placenta to the external orifice of the vagina, we should turn it upon its own axis so as to twist the membranes together, and by these means to bring away the

whole of the secundines. It sometimes happens that the last efforts of the uterus to expell the child, also separates, and expells the placenta into the upper part of the vagina, where it is retained either inconsequence of the placenta being unusually large or the external parts being rigid and contracted, which they are apt to be especially in first labours. In such cases the practitioner may wait until his patience is tired, yet no pains will come on. If under such circumstances the finger be slid up along the funis, the placenta is felt low down, and the insertion of the cord into it, may readily be perceived. In such cases Professor James thinks it proper directly to proceed to the extraction of the placenta, by gently pulling at the cord, and if the placenta be large, by introducing the finger and bringing down first one edge and then the rest of the placenta will follow.

I shall next proceed to treat of the management of the placenta under the second head, viz when retained either in consequence of atony of the uterus; or irregularity in its contraction; or of a preternatural adhesion of the placenta to the internal surface of the uterus. The placenta from some of these causes may sometimes be retained in the uterus, for many hours and even for some days.

Some from a confidence in the powers of nature have inculcated a rule of conduct, that unless flooding take place, the placenta should not be extracted. Others with equal zeal advised it to be brought away immediately after the birth of the child. The safest practice seems to lie between the two extremes. To leave the expulsion of the placenta altogether to nature, is a step attended with great danger; for as long as it is retained we may be assured that the uterus has not contracted regularly and strongly. If then under

these circumstances, the placenta should be partially or completely detached, hemorrhage is very likely to occur. If it still adhere to the uterus the risk of hemorrhage is certainly diminished, for those vessels only which open on the decidua can be exposed; but we have no security that this adhesion shall continue universal for any length of time. As long then as the placenta is retained, the woman is never free from the risk of flooding. In many cases she has died from this cause before the placenta came away; and its exclusion has sometimes been followed by fatal hemorrhage. Mr White in his treatise on the management of pregnant and lying-in women, relates several cases, in which the practice of leaving the placenta to be expelled by nature alone, was productive of fatal hemorrhage, although the placenta was at last expelled. This, although a dreadful accident, is not the only one arising from the retention

of a part or the whole of the placenta; for great debility, constant retching and fever are produced by this cause and may ultimately carry off the patient.

The celebrated Ruysch, we are told was the first to abandon the absurd practice of hastily extracting the placenta; enlightened no doubt by his superior anatomical knowledge. Dr. Hunter in Great Britain fully pointed out its impropriety. He however erred on the other extreme. Teaching that nature unassisted was adequate to the expulsion of the placenta in every case, he never interfered; but experience, says Dr. Hamilton, soon taught him the error of his practice, for, by suffering the placenta to remain too long, he lost five patients of rank in one year.

It is therefore not without great reason that women are anxious for the expulsion of the placenta; and this prejudice may have a good effect in opera-

ting against the conceits of speculative men who suppose that nature is in every instance adequate to the accomplishment of her own purposes. On the other hand daily experience must convince every one, that there is no occasion for extracting the placenta immediately after the birth of the child; for it is usually expelled, in perfect safty, within forty minutes after the child is delivered. Nay we find that the hasty extraction is directly hurtful, both as it is painful, and as it is sometimes followed by uterine hemorrhage, and, if rashly performed by inversion of the uterus.

The practice then may be comprised in two directions: firstly, that we ought never to leave the bedroom until the placenta be expelled; and secondly, if it be not excluded within an hour after the delivery of the child, we ought to extract it. If however hemorrhage should supervene, we must interfere.

This point being adjusted, it is next to be inquired how the retention of the placenta may be prevented, and if not prevented how it should be extracted.

With regard to the first question, it may be answered, that the placenta is less apt to be retained, if the expulsion of the child be conducted slowly, and the uterus made to contract fully upon it.

As to the mode of extracting the placenta, we can be at no loss, if we recollect, that the expulsion of the placenta is accomplished, by the contraction of the uterus.

The placenta however may be retained from different causes. It may be occasioned by the torpid state of the uterus; or by an irregular or spasmodic contraction of the uterine fibres forming a cyst round the placenta, commonly called the hour glass contraction; or by an adhesion of a part or the whole of the placenta.

Our mode of treatment ought therefore to be adapted to each particular case.

When the placenta is not expelled inconsequence of a torpid state of the uterus, our object must be to excite it to contraction. For this purpose we are directed to pass the navel string several times round the fore finger of the left hand and slide the right gently and cautiously along the cord towards the os uteri. This is often sufficient to make the uterus contract and expell the placenta. But if it do not, the hand, introduced into the cavity of the uterus, is to be moved a little, or pressed gently on the placenta, at the same time we pull very slightly at the cord, or lay hold of the detached placenta with the hand, and move it about, and, when the uterus is felt to contract, with caution extract it slowly. This operation requires no exertion on the part of the accoucheur; for the uterus being excited to contract, forces

the placenta down, and if any force is used to extract it we do harm. Attempts, to bring away the placenta by pulling strongly at the cord, whether the hand be introduced into the uterus or not, are always improper. When persisted in they generally end either in the laceration of the cord or the inversion of the uterus; to guard against this latter accident we should be particularly careful.

No attempts therefore should be made to bring away the placenta, either by pulling at the cord or by the hand introduced into the uterus, until we are satisfied that the placenta is detached, and the uterus in a state of contraction. This can be felt by the hand passed beyond the placenta. When we feel a disposition in the fundus uteri to descend with the placenta, we are to carry it up again and support it until the uterus contract, so as to expell both the hand and placenta.

We should constantly bear in our mind, that we introduce the hand, not so much for the purpose of extracting the placenta, as of stimulating the womb to expell its contents; hence if we extract the placenta hastily we shall run the risk to do immense mischief, excite flooding and inversion of the uterus, and to leave the patient altogether in a more dangerous condition, than she had been in.

This method of stimulating the uterus to contraction by introducing the hand into its cavity, is almost always painful to the woman, disagreeable to the accoucheur, and not always as prompt in its operation as might, upon many occasions, be desired; thereby giving time for considerable hemorrhage to take place, before the placenta can be brought away with safty. Moreover the extraction of the placenta by the hand

may, if great care be not taken on the part of the practitioner, be followed by an inversion of the uterus.

When ~~then~~ it is evident, from a careful examination *per vaginam* and of the uterine region, that no contraction has taken place, and that the placenta is retained in consequence of an atonic state of the uterus, particularly after a tedious and severe labour; when there are no pains, and the patient is threatened with flooding, we ought to take measures immediately to bring on the prompt contraction of the uterus, and the expulsion of the placenta. The internal use of the ergot is known to produce this effect very promptly. Professor James, under such circumstances, recommends the ergot (secale cornutum) in the dose of one scruple finely powdered and mixed with any simple syrup. He has frequently employed it and

always with success; having always brought on the speedy contraction of the uterus and the expulsion of the placenta. An infusion or decoction acts more promptly than the ergot in powder, and should therefore be used in cases where flooding is threatened or has actually come on.

Except perhaps in very corpulent women, we can almost always ascertain the state of the womb after the delivery of the child, by applying the hand to the uterine region. If from torpor or atony it has not in some measure contracted upon the placenta, then the uterine region feels relaxed through the integuments; we can perceive no firm, contracted mass within. This would be the case in which the use of the ergot, is attended with the happiest effects.

There are however two circumstances under which the placenta may be retained,

which require some modification of practice. The first is where the placenta is retained by spasm or irregular contraction of the uterus round the placenta, forming what has been called the hour glass contraction.

In this case, when the hand is conducted along the cord through the *os uteri* towards the insertion of the cord into the placenta, the placenta is not perceived; but the hand is led by the cord to a contracted part like a second but contracted *os uteri* beyond which a cyst is formed in which the placenta is lodged. The retintion from this cause is said by some to be owing to an irregular contraction of a band of fibres below the placenta, so as to confine it in the upper portion of the uterus. By others it is said to be owing to a torpid state of that part of the uterus in which the placenta is situated, all the rest of the womb contracting regulary; or that the uterus contrarcts round the placenta.

As this irregularity is not natural to the contraction of the uterus, there must be some cause that determines the uterus to take on this irregularity in its action. Is it not probable that a morbid or preternaturally firm adhesion of the placenta may be the cause, at least in some instances, of this irregular contraction of the uterus? If we consider that, inorder for the uterus to separate the placenta from its surface, it is required that the uterine fibres should contract strongly and considerably directly over the spot at which the placenta adheres; hence it happens, that, although the uterus contracts strongly during the efforts made for the expulsion of the child, the placenta is not generally separated from the uterus; because the uterine fibres are not contracted to the same extent as when it contracts upon a small body such as the placenta after the expulsion of the child. When ever therefore the uterus over the adhering portion of the placenta contracts to a certain

extent it must have the effect of separating it from its surface; because the placenta, although capable of yielding, from the nature of its structure to the contraction of the uterus, must ultimately resist and separate. If this view of the subject be correct, it must be evident, that whenever an unusually firm adhesion of the placenta exists and the uterus contracts with ordinary vigour, an hour glass contraction and a retention of the placenta may result. Or even when but a slight adhesion of the placenta exists and the uterus contracts feebly, this impediment, to the contraction of the uterine fibres over the part to which the placenta adheres, may determine the uterus to contract round the placenta in the form of an hour glass. When the placenta therefore is retained in consequence of this sort of contraction, the stricture, through which the cord passes to the placenta, must be overcome before the placenta can be brought away. This may be accomplished by

gradual, and continued attempts to introduce one, two or more fingers; these efforts if cautiously made are perfectly safe. It will however be observed that the uterus at short intervals contracts briskly, which is accompanied with pain, but this contraction is confined to the stricture only, the cavity of the womb not being lessened by it. During this state of contraction and pain, all attempts to dilate the aperture are hurtful. We must be satisfied with keeping the fingers in their place to preserve the ground which we have gained. Opiates have been proposed to remove the spasm, and render the introduction of the hand unnecessary; they seldom however succeed alone, but given in a full dose, may make the manual attempt more easy. Sometimes the sudden applica of a cloth, dipped in cold water, to the belly has the same effect. The ergot might possibly answer a good purpose even in cases

of retention from hourglass contraction by stimulating the uterus to a more uniform contraction. Professor James, in such cases has had no experience with the ergot, and therefore cannot give his opinion, how far it might be useful.

The second circumstance to which allusion has been made, is an adhesion of the placenta which usually is only partial. This may occur with or without a change of structure but in general the structure is more or less altered, the adhering part being denser than usual, sometimes cartilaginous, indurated or assified. The hand being introduced, the separation of the adhering part should not be attempted hastily, nor by insinuating the fingers between the placenta and the uterine surface. It is better to press the hand upon the surface of the placenta, so as to stimulate the uterine fibres to contract more briskly at

that spot; or by gently rubbing or as it were pinching the placenta between the fingers and the thumb it may be separated. If however the adhesion of the placenta be very intimate, we must not, in order to destroy it, scrape and irritate the surface of the uterus, but ought rather to remove all that which does not adhere intimately, leaving the rest to be separated by nature. Smellie relates two cases of this kind. In the first he brought away the indurated portion but the woman died from hemorrhage. In the second he left the adhering portion and the woman recovered. La Motte had also cases of this kind. In these, though the adhesion was very intimate, he brought away the placenta in pieces. But ~~in leaving the case to nature~~, we are not to proceed with impatience, nor attempt to bring away the non adhering portions until a considerable time has elapsed and

cautious efforts have been made to remove the entire placenta; thus satisfying ourselves of the existence of an obstinate and intimate union. Cases in which this conduct is necessary are very rare, and when they do occur there is usually an induration of the adhering part. It is generally thrown off in a putrid state in forty eight hours.

Sometimes the placenta adheres when it is unusually soft and tender, and then we must with peculiar care avoid hasty efforts, by which the placenta would be lacerated and part of it left behind, which would be hurtful afterward; whereas by a little more patience and gentle pressure on the surface of the placenta, the uterus might have been made to throw off the whole. After the placenta is removed a bandage should be passed moderatly tight round the belly to keep up gentle pressure; the patient left to rest, and watched.

It sometimes happens that the whole or a considerable portion of the placenta, from an obstinate adhesion or inefficient means employed to over come it, is left in the uterus for Sometime, and then the patient is exposed to great danger. Hemorrhage is not the only risk; for in many cases severe headach, hysterical affections, sickneſs, nausea, prostration of Strength, and fever have taken place, and continued until the placenta was expelled after which the patient began to recover. On the other hand it has, though more rarely occured, that the placenta, having been retained for a length of time, has been expelled before these symptoms became urgent; but they have afterwards gradually increased and carried off the patient. In a case related by Mr. White the secundines after a clyster came away in a putrid state on the fifth day. On the sixth the patient

was much oppressed, had fœtid breath and other bad symptoms. On the twelfth an eruption appeared and she died on the twenty second. Sometimes when portions of the placenta are obstinately retained, the symptoms run so high that the patient sinks under the disease as in ordinary cases of hectic; with frequent small pulse; burning heat of the hands and feet, profuse perspiration followed by universal emaciation and death; or she dies with symptoms similar to those of malignant fever; or is carried off suddenly by a convulsion or by an attack of hemorrhage. these symptoms have a very indefinite duration for sometimes the patient dies in a very few days, in other instances they are protracted for two or three weeks. Dr. Perfect relates a case in which the secundines were retained until the eighth day, when the patient died. Her stomach rejected all food and

medicine, she had a weak and quick pulse hiccups and *subsultus* tendinum. In another case the placenta was retained until the thirteenth day, and the patient died on the twentieth. Sometimes no hemorrhage take place during the whole of the disease, but occasionally repeated hemorrhage does occur, adding greatly to the debility of the patient. In several cases inflammation has come on and spread to the intestines. In some of these the placenta has been afterwards expelled, in others extracted, but very few have recovered. On inspecting the uterus, it either been found black as if it had been in a state of gangrene or high inflammation or suppuration whilst the parts in the vicinity were in various stages and degrees of inflammation. Since the retention of portions of the placenta is sometimes productive of such formidable symptoms, we should in every servations after death a record was given in

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[illegible] the symptoms are likely to [illegible] case be extremely solicitous to bring away the whole of the secundines.

When however these symptoms in consequence of the retention of a portion of the placenta have taken place, our object ought to be to remove the cause and to support the patient under the disease. By some however these symptoms have been attributed, not so much to the retention of the placenta, as to concomitant circumstances, such as injury done to the uterus by the hand in endeavouring to take away the placenta. But we find precisely the same symptoms to take place, when the whole of the placenta has been left, without any attempts having been made to remove it. They are produced when any substance is left to corrupt *in utero*. Similar symptoms are said by Dr. Perfect to be produced when the head of the child is left *in utero*. They contin-

ue as long as this remains, and cease as soon as it is expelled, proving the strong sympathy which exists between the uterus and the other systems of the body.

In order to remove the cause if possible, it may be proper to examine with the finger introduced into the os uteri, whether any portion of the placenta can be felt and removed, but generally this cannot be done freely; for the uterus itself as well as its mouth is hard and contracted, and no violent or painful attempt with the finger or hand ought to be made. But whenever we can feel and act easily upon any portion, we ought slowly and gently endeavour to bring it away. If the whole of the placenta have been left, such attempts are still more necessary and likely to succeed. In such cases whenever the symptoms become urgent, or hemorrhage supervene, we ought to introduce the hand and

bring away the offending cause. The os uteri often affords considerable resistance to the introduction of the hand, in cases where the retention has subsisted for some days; but by very slow and gentle efforts such as are scarcely felt by the patient, it may be dilated. Sometimes it yields very easily or is not at all contracted. If however it be rigid and unyielding we must not use violence; but this condition of the os uteri is rarely conjoined with a retention of the entire placenta.

If there should be uterine hemorrhage; the os uteri soft and open; the uterus not very strongly contracted, and a probability that the placenta had become detached, a dose of ergot might probably be given with the greatest advantage.

When a portion only of the placenta is retained, we may derive advantage from

injecting frequently warm water, or a warm infusion of chamomile flowers, or water with a very small proportion of muriatic acid added to it. These injections may be most effectually administered, by fixing a female catheter to an elastic gum bottle; or a syringe with a long pipe may be employed.

Sometimes ~~the~~ natural or artificial vomiting assists the expulsion; if the state of the Patient does not forbid it, this remedy may be tried.

The Patient should be allowed the free use of ripe fruit and the vegetable acids, and a mild, light diet should be directed in small quantities at a time. The bowels ought to be kept in a soluble state by clysters and laxatives, and opiates should occasionally be given to allay irritation. Nausea and vomiting

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tion injection of [illegible] milk [illegible]
or water with a very small portion of
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may be most effectively administered
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may be checked or mitigated when urgent by effervescent draughts. Bark, in small doses, has been given, but not much confidence is now placed in it. When there is a fulness about the abdomen with a tendency to inflammation, purgatives are of service. When the nervous system becomes much disturbed, a tablespoonful of the camphorated mixture prepared according to the dispensatory may be given every two or three hours according to circumstances, or the same quantity of the medicine may be given diffused in milk.

The patient should be kept clean and comfortable, the bed clothes light, the chamber not too warm and well ventilated, and a state of perfect rest and a horizontal posture should be enjoined. We ought constantly to bear in mind

during the whole of the process, that the exellency of the management of the placenta consists in bringing away the secundines without exciting either flooding or an inversion of the womb, hence caution and deliberation on the part of the accoucheur and prudence on the part of the patient, are required.

Finis.